



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/782,326	02/19/2004	Thomas E. Dueber	HP0085USNA	5406

23906 7590 06/29/2005

E I DU PONT DE NEMOURS AND COMPANY  
LEGAL PATENT RECORDS CENTER  
BARLEY MILL PLAZA 25/1128  
4417 LANCASTER PIKE  
WILMINGTON, DE 19805

EXAMINER

HAMPTON HIGHTOWER, PATRICIA

ART UNIT	PAPER NUMBER
----------	--------------

1711

DATE MAILED: 06/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/782,326

Applicant(s)

DUEBER, THOMAS ET AL

Examiner

Patricia Hightower

Art Unit

1711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>6/1/2004</u> . | 6) <input type="checkbox"/> Other: _____  |

**Information Disclosure Statement**

The information disclosure statement filed June 01, 2004 has been considered and has been made of record.

**Obviousness-type Double Patenting Rejection**

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-18 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-32 of copending Application No. 10/321,142. Although the conflicting claims are not identical, they are not patentably distinct from each other because the instant application and the copending application are viewed as claiming overlapping subject matter that is viewed as not being patentably distinct. The instant application claims a polyimide composition comprising a polyimide resin and an organic solvent, wherein the polyimide is denoted by the formula I, wherein X is O, S(O)<sub>2</sub>, C(CF<sub>3</sub>)<sub>2</sub> or a mixture of two or three of O, S(O)<sub>2</sub> and C(CF<sub>3</sub>)<sub>2</sub> wherein Y is a diamine component selected from the group consisting of m-phenylene diamine, 3,4'-diaminodiphenylether, 4,4'-diamino-2,2'-

Art Unit: 1711

bis(trifluoromethyl)biphenyl, 3,3'-diaminodiphenyl sulfone, bis(4-(4-aminophenoxy)phenyl sulfone or 9,9-bis(4-aminophenyl)fluorine, a thermal crosslinking agent selected from bisphenol epoxy resin, an epoxided copolymer of phenol and aromatic hydrocarbon, a polymer derived from epichlorohydrin and phenol formaldehyde, and 1,1,1-tris(p-hydroxyphenyl)ethane triglycidyl ether, a methal adhesion agent selected from polyhydroxyphenylether, polybenzimidazole, polyetherimide and polyamideimide, a metal or metal oxide that is pretreated with a silane or titanate agent,, a polyimide solution useful to make electronic circuit packages such as a wafer-level packaging as semiconductor stress buffers, interconnect dielectrics, protective overcoats, bond pad redistribution or solder bump under fills and the polyimide used as a polymer binder in a polymer thick film resistor, a discrete capacitor, a planar capacitor, an encapsulant or a conductive adhesive. The instant application employs overlapping reactants and resulting end uses with the copending application's resistor composition comprising a non-electrically conductive binder selected from the group of one or more polyimide (PI), polyamideimide, polyetherimide, epoxy, etc., wherein the diamine component is bisaminophenoxyphenylsulfone, 3,3'-diaminodiphenyl sulfone, 2,2'-trifluoromethyl-4,4'-diaminobiphenyl; the dianhydride is selected from 4,4'-oxydiphthalic dianhydride, bisphenol A dianhydride, etc., electrically conductive particles selected from gold, platinum, silver, copper, nickel, zinc, ruthenium oxide, antimony tin oxide, etc., an adhesion promoter selected from benzimidazole, silanes, titanates, etc, the resistor composition being a resistor paste optionally comprising a carrier agent, wherein the resistor composition being a resistor

Art Unit: 1711

component in a flexible printed circuit printed wiring board, s multi-chip module package, a ball grid array package, a chip scale package or a tape automated bonding package. The polyimide resin composition of the instant application is encompassed by the resistor composition of the copending application. In view of both the applications claiming overlapping compositions employing overlapping reactant and end resulting use; it is viewed that the resistor composition of the composition possess the instantly claimed characteristics.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

***Prior Art***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. These references are cited to show the state of the art of polyimide copolymers, positive photoresist compositions containing a polyimide resin and polyimide compositions employed in preparing electronic parts; Matsubara, Auman and Shu.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patricia Hightower whose telephone number is (571) 272-1073. The examiner can normally be reached on M-F from 9:30 A.M. - 6:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (571) 272-1078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1711

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
P. Hampton Hightower  
Primary Examiner  
Art Unit 1711